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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,581	03/18/2004	Kenneth L. Levy	P0956	7267
23735 7590 01/25/2008 DIGIMARC CORPORATION 9405 SW GEMINI DRIVE BEAVERTON, OR 97008				
EXAMINER				
STRONCZER, RYAN S				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/804,581

Applicant(s)

LEVY ET AL.

Examiner

Ryan Stronczer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8506)
- Paper No(s)/Mail Date 4-4-05, 1-9-06
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Specification

The attempt to incorporate subject matter into this application by reference to U.S. Pat. Nos. 6,122,403, 6,505,160, 6,411,725, and 6,522,769, and U.S. Patent application Ser. Nos. 09/476,686, 09/660,756, 10/060,049, and 09/571,422, is ineffective because the disclosure does not provide sufficient detail as to what subject matter is being incorporated into the present application.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-29 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-56 of copending Application No. 10/060,049. Although the conflicting claims are not identical, they are not patentably distinct from each other because the differences between the conflicting claims are descriptive in nature and not in the scope of said claims.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 23 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not

described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 23 recites the method of claim 1, further comprising, "...wherein the identifier is used to notify a network operator that network content is not properly synchronized with the broadcast content." The specification does not provide antecedent basis for this claim as it does not disclose the capability to identify that a lack of synchronization between network and broadcast content, nor does it disclose the capability to communicate such a discrepancy with the network operator. The specification makes passing mention to a "second verification" at the end of paragraph 0046 but does not teach a method for accomplishing such verification, nor is the term verification defined elsewhere in the specification.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8, 11-16, 22, and 18-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Levy et al. (Pub. No.: US 2002/0162118).

Regarding claim 1, Levy teaches a system in which a consumer's set top box receives content containing an embedded identifier and which allows the consumer to:

...[select] content (e.g. a pizza commercial) to interact with (A consumer may select content via a pointer, remote control, touch screen TV, web pad, graphical user interface, mouse,

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etc.). A corresponding unique identifier is detected via detector 22. In one embodiment, in which digital watermarks carry content identifiers, the detector detects a digital watermark and extracts the associated content identifiers. The consumer (or the consumer's receiver 24) uses the content identifier to query database 30. For example, the content identifier is passed to the database 30 to index corresponding interactive data. (In the present example, a URL is returned to the receiver and the consumer is linked to a corresponding pizza delivery service website. In another example, the interactive data includes interactive content, and such content is made available to the user.) [0042]

As to the claimed step of "extracting an identifier embedded in broadcast content," the detector 22 taught by Levy performs the same functionality as well as the recited "using the identifier to identify corresponding network content." As to the recited "posting corresponding network content on a network device," Fig. 1 of Levy teaches a database 30 which communicates with the user's receiver/detector, as well as,

...facilitat[ing] the mapping of content identifiers (and/or context data) to interactive data...Interactive content preferably includes content rendered on an end-user's device in response to a request by a user (e.g., HTML pages, Java applets, text, graphics, etc., etc.). One example of interactive data is a URL, pointer or IP address, which is associated with the particular content. [0038]

As quoted above, Levy teaches a database containing interactive content corresponding to broadcast content which can be accessed in response to a request for said content by either the user or the user's detector/receiver.

As to claim 2, Fig. 1 and 12-15 of Levy teach that the user receives a either an audio/video signal or a broadcast signal from a containing said identifier from a cable headend or distribution system.

As to claim 3, Levy teaches, "[t]he content ID...is preferably embedded within the content via digital watermarking technology or other steganographically [sic] embedding method" [0014].

As to claim 4, Levy teaches a system in which a unique identifier is embedded within content which is then distributed to the user. Levy teaches, "[t]he term 'content' is

defined broadly herein to include audio, video, text, graphics, and/or still images...[also] audio signals, video signals, text, movies, commercials, advertisements, programming (both TV and computer programming), scripting, and so forth" [0032].

Claim 5 recites the method of claim 1, "...wherein the identifier triggers automatic posting of the corresponding network content." Levy teaches, "...a trigger can be used by a STB to access additional data. In one example, a STB automatically communicates with a web site corresponding to a trigger (e.g., a URL)" [0085].

Claim 6 is rejected by paragraph 0038 of Levy as applied to claim 1.

As to claim 7, the system taught by Levy can detect and decode content identifiers embedded in a video signal; likewise, any content creator can embed content identifiers in a program or video signal. Levy teaches, "[c]ontent creators **14** create content items. For example, a film or television studio (e.g., a content creator) produces a movie, drama, sit-com or news-program, e.g., the content item" [0032]. Levy's system can inherently detect and decode content identifiers in a shopping program, as claimed. Regarding the limitation that "the particular items are products or services," paragraph 0042 of Levy, as applied to claim 1, teaches that content identifiers can correspond to interactive content as selected by the content creator. A broadcast source or cable headend, as taught in Fig. 3-4 and 15-16, respectively, is inherently capable of transmitting a shopping program to the user.

Claim 8 recites the method of claim 6, "wherein the broadcast of the programs are live broadcasts..." As applied to claim 7, the system taught by Levy can detect and decode content identifiers embedded in a video signal regardless of the source of said

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video signal. A broadcast source or cable headend, as taught in Fig. 3-4 and 15-16, respectively, is inherently capable of transmitting a live broadcast to the user.

Claim 11 is rejected by Levy et al. as applied to claim 1; the recited "single URL" is equivalent to the "network address" recited in claim 1.

Claim 12 is rejected by paragraph 0042 of Levy et al. as applied to claim 1.

Claim 13 recites the method of claim 12, "wherein the content returned to the user's device enables the user to conduct an electronic transaction relating to the program." As discussed above, Levy teaches the method of claim 12 wherein:

The consumer (or the consumer's receiver **24**) uses the content identifier to query database **30**. For example, the content identifier is passed to the database **30** to index corresponding interactive data. (In the present example, a URL is returned to the receiver and the consumer is linked to a corresponding pizza delivery service website. In another example, the interactive data includes interactive content, and such content is made available to the user). [0042]

If the user's device (e.g. receiver **24**) is capable of receiving a URL and displaying the corresponding website (e.g. the pizza delivery service website taught by Levy), it is inherent that said device would be able to execute an electronic transaction or perform any other function typical of a web-enabled device.

Claim 14 is rejected by Levy et al. as applied to claim 13.

Claim 15 is rejected by Levy et al. as applied to claim 1.

As to claim 16, Levy teaches, "In step 4, the watermarked content is distributed, e.g., via a cable head end and associated network, to a user device (e.g., a STB or other computing device). The user device detects and decodes the digital watermarks to retrieve the embedded content identifiers." [0081].

Claim 18 is rejected by Levy et al. as applied to claim 16.

As to claim 19, Levy teaches a watermark ("WM") decoder or detector in Fig. 2, 8, 11, and 14-16.

As to claim 22, it is inherent in making an electronic transaction that the user's device would provide an account number to facilitate said transaction.

As to claim 24, Fig. 1 of Levy teaches an embedder and a database. Levy teaches:

As shown in the FIG. 1 embodiment, an embedder **16** is provided to embed content with digital watermarks. A digital watermark may include a unique identifier (or identifiers) in a payload, message or other watermark components. The watermark itself may alternatively serve as the content identifier...The content identifiers are maintained in database **30**. The content identifiers can be linked to additional information in the database **30**. In one embodiment, database **30** facilitates mapping of content identifiers (and/or context information) to interactive data, and in some cases, mapping of content identifiers and context information directly to interactive content...Interactive content preferably includes content rendered on an end-user's device in response to a request by a user (e.g., HTML pages, Java applets, text, graphics, etc., etc.). One example of interactive data is a URL, pointer or IP address, which is associated with the particular content. [0036-38]

The database and embedder taught by Levy perform substantially the same function as the recited embedder and database.

Claim 25 teaches the system of claim 24, "wherein the embedder comprises a digital watermark embedder for modifying audio or video signals of a broadcast program to encode the identifiers in a substantially imperceptible manner in the audio or video signals." Fig. 1 of Levy teaches "an embedder **16** is provided to embed content with digital watermarks" [0036]. Levy defines content as, "...audio, video, text, graphics, and/or still images. Content may also include audio signals, video signals, text, movies, commercials, advertisements, programming (both TV and computer programming), scripting, and so forth" [0032].

Regarding claim 26, as there is no antecedent basis for the recited "consumer device" in the instant application, it will be interpreted hereinafter to refer to a device operated by the user, e.g. a set top box (STB). Fig. 3-5 of Levy teach a STB which receives broadcast content and provides the user with access to interactive content associated with said broadcast content.

As to claim 29, it is inherent that a system which receives a broadcast signal would be operable with any broadcast signal containing identifiers regardless of whether the content being broadcast was a live or pre-recorded program.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9-10, 20, and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Levy et al (Pub. No.: US 2002/0162118).

As to claim 9, *Hargrave's Communications Dictionary* defines radio as, "telecommunication by modulation and radiation of electromagnetic waves." The system taught by Levy et al. is intended to be used with content delivered by a broadcast source (Fig. 3-6. 9-10). As broadcasting television content inherently involves the modulation and radiation of electromagnetic waves, the recited "radio broadcast" is rejected by Levy et al. Furthermore, Levy defines content in which

identifiers may be embedded as, "...audio, video, text, graphics, and/or still images. Content may also include audio signals, video signals, text, movies, commercials, advertisements, programming...and so forth" [0032]. As such, it would have been obvious to one of ordinary skill in the art at the time of the invention that a radio broadcast could be embedded with an identifier.

Claim 10 recites the method of claim 9, "wherein the broadcast content comprises a satellite radio broadcast." As addressed with respect to claim 9, Levy teaches that audio and video signals are content that can be embedded with identifiers. Examiner takes Official Notice that it is well known in the art to use satellite distribution technologies to transmit audio and video signals.

As to claim 20, it is obvious that a user's device would provide information about itself to ensure that the information returned is in a format the device is capable of displaying. It is desirable and necessary for a device to provide such information so that requested information can be displayed to the user in a readable format.

As to claim 27, Fig. 13 of Levy teaches that the owner of the interactive content registers the content with a database containing content identifiers and associates content identifiers with said content items.

Content...is authored and/or registered in step 1. The registration process may include a step of contacting (or communicating with) a central site to associate content identifiers with various content items (or subsets of a content item). Corresponding data records are established in the database (step 2). This database management process may include the steps of associating interactive content with the unique identifiers, creating data fields, cataloging the identifiers, receiving additional content to be linked to the identifiers, etc. Digital watermarks are embedded within the content in step 3. As discussed, the watermarks carry (or include) the unique content identifiers. [0081]

In order for an operator to associate content identifiers with content items (or subsets thereof), as taught by Levy, it would be necessary for the operator to be able to input information regarding the content, such as the name of an item that is the subject of a broadcast, and receive content identifiers associated with said information (e.g. content identifiers corresponding to said item name). Additionally, Levy teaches:

The content identifiers are maintained in database **30**. The content identifiers can be linked to additional information in the database **30**. In one embodiment, database **30** facilitates mapping of content identifiers (and/or context information) to interactive data, and in some cases, mapping of content identifiers and context information directly to interactive content. [0038]

It would have been obvious to one of ordinary skill in the art at the time the invention was made that an operator could input information relating to content items (such as the name of an item which was the subject of a broadcast) into a database containing content identifiers and receive suitable content identifiers corresponding to the said content information. It is well known in the art that a computer interacting with the database taught by Levy would function as the recited input device in claim 27 the instant application and perform substantially the same function as the recited input device.

Claim 28 is rejected by Levy et al. as applied to claim 27.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Levy et al. as applied to claims 12, 15, and 16 above, and further in view of Seder et al. (Pub. No.: US 2002/0164053).

Claim 17 recites the method of claim 16, wherein the recited "user's device" is a cell phone. As discussed above, Levy teaches that "extracting the identifier used to

generate the request," as recited in claim 16, can be performed by "...a user device (e.g., a STB or other computing device)" [0081].

As to a cell phone detecting and/or decoding an identifier, Seder teaches:

A camera-equipped cell phone, or wireless palmtop computer with imaging capability, can be used by the contractor to acquire image data from the drawing, decode the embedded watermark ID, query a remote database for the latest revision number of that drawing, and present the latest revision number to the contractor. [0055]

Seder teaches that a cell phone can be used to detect an identifier embedded in an image (e.g., the "embedded watermark") and use the decoded information to query a database for information about the object containing said identifier.

Given that Levy teaches that a "computing device" can be used in lieu of a STB, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a cell phone such as that taught by Seder to detect and decode an identifier and perform the claimed functionality.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Levy et al (Pub. No.: US 2002/0162118) as applied to claims 1-16 and 20 above, and further in view of Kolawa et al. (US Pat. No.: 6,370,513).

Claim 21 recites the method of claim 12 wherein, "the user's device provides information about the user to enable information returned to the user to be customized to the user." Paragraph 0042 of Levy teaches the method of claim 12, but does not explicitly teach that the user's device provides information about the user to provide the recited functionality. Kolawa teaches a system that recommends restaurants to a user based on the user's preferences and location. "The user also provides other

identification information, such as user name, address, and telephone number...the system recommends a restaurant along with dishes that cater to the user's tastes. In doing so, the system access a restaurant database including a list of restaurants in the user's geographical area" (Col. 17-19). In this case, the restaurant recommendations taught by Kolawa would clearly be an example of information that is customized to the user, as recited. Incorporating the recommendation system taught by Kolawa with the system taught by Levy would be desirable as it would enable the Levy system to better provide users with content they would find interesting.

Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan Stronczer whose telephone number is (571) 270-3756. The examiner can normally be reached on M-F 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Vu Le can be reached on (571) 272-7332. Customer Service can be reached at (571) 272-2600. The fax number for the organization where this application or proceeding is assigned is (571) 273-7332.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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